REMARKS

Entry of this amendment and favorable consideration of this application are respectfully requested. In the Office Action dated July 26, 2004 (the "Final Office Action"), the Examiner has made final the rejection of claims 1, 2, 5, 6 and 73 under 35 U.S.C §102(b) as anticipated by WO 91/07505 to Hornes et al. ("Hornes"); and rejected Claims 1-6, 23-32, 37, 73 and 74 under 35 U.S.C §102(e) as anticipated by U.S. Patent No. 6,610,742 to Zhu et al. ("Zhu").

The Examiner has objected to Claims 33-36 as dependent upon a rejected base claim, but noted such claims would be allowable if rewritten in independent form. Claims 33-36 have been rewritten in independent form. Thus, allowance of claims 33-36 is respectfully requested.

With respect to the rejection of Claims 1, 2, 5, 6 and 73 under 35 U.S.C §102(b) as anticipated by Hornes, this rejection is respectfully traversed.

As noted by the Examiner in response to applicants' prior arguments, the presently claimed plasmid has three elements: "a 'primer sequence' which has homology to a first portion of a target nucleic acid (which must encode a polypeptide), a 'collar sequence' which must have homology to a second portion of the same target nucleic acid, and a restriction site between these first two elements. . . ." (See Final Office Action at page 5.) According to the Examiner,

> Both Hornes and Zhu first teach the production of a nucleic acid that encodes a polypeptide.... This nucleic acid is then cloned by recombination into a given plasmid, thus there is a functional requirement that the target nucleic acid encoding the polypeptide and the plasmid contain two regions of homology that are necessary for the recombination to occur.... Thus, both the target nucleic acids and the plasmids taught by Hornes and Zhu comprise the structural and functional equivalents of the "primer sequences" and "collar sequences" set forth in the instant claims. While it is true that the nucleic acids in both cases are engineered at their 5' and 3' ends with primer sequences having homology to the plasmid, the fact remains that the plasmids used in the teachings of

> Hornes and Zhu have these regions of homology (i.e., the "primer sequences" and "collar sequences") with the nucleic acid that encodes a polypeptide.

(Final Office Action at pp.5-6.)

It is respectfully submitted that Hornes does not anticipate the instant claims. Nowhere does Hornes disclose or suggest a plasmid having a primer sequence incorporated into the plasmid, the primer sequence being capable of annealing to a first portion of nucleic acid encoding a polypeptide, and a collar sequence incorporated into the plasmid, the collar sequence being capable of annealing to a second portion of the nucleic acid encoding the polypeptide, as required by amended Claim 1.

As admitted by the Examiner, Hornes teaches nucleic acids engineered at their 5' and 3' ends with primer sequences having homology to the plasmid. Nowhere is there any teaching in Hornes that the plasmids utilized therein bind to the nucleic acid encoding a polypeptide – the plasmids used by Hornes bind only to the engineered terminal regions, and do not bind the nucleic acid encoding the polypeptide itself. To the contrary, the sequences incorporated into the presently claimed plasmids do not anneal to primer sequences engineered to the ends of the nucleic acid encoding the polypeptide, **they anneal to the nucleic acid encoding the polypeptide itself**. Therefore, in view of the foregoing remarks, reconsideration and withdrawal of the rejection of Claims 1, 2, 5, 6 and 73 as anticipated by Hornes is respectfully requested.

Claims 1-6, 23-32, 37, 73 and 74 were rejected under 35 U.S.C §102(e) as anticipated by Zhu. This rejection is also respectfully traversed.

As with Hornes, nowhere does Zhu disclose or suggest a plasmid having a primer sequence incorporated into the plasmid, the primer sequence being capable of annealing to a first portion of nucleic acid encoding a polypeptide, and a collar sequence incorporated into the plasmid, the collar sequence being capable of annealing to a second portion of the nucleic acid encoding the polypeptide, as presently recited in Claim 1.

Moreover, as with Hornes, Zhu teaches nucleic acids engineered at their 5' and 3' ends with primer sequences having homology to the plasmid. Nowhere is there any teaching in Zhu that the plasmids utilized therein bind to the nucleic acid encoding a polypeptide – the plasmids used by Zhu bind to the engineered terminal regions, not the nucleic acid encoding the polypeptide itself. To the contrary, the sequences incorporated into Applicants' plasmids do not anneal to primer sequences engineered to the ends of the nucleic acid encoding the polypeptide, **they anneal to the nucleic acid encoding the polypeptide itself**. Therefore, in view of the foregoing remarks, reconsideration and withdrawal of the rejection of Claims 1-6, 23-32, 37, 73 and 74 as anticipated by Zhu is respectfully requested.

It is believed that all the claims of the application as now presented, i.e., Claims 1-6, 23-37, and 73-74, are patentably distinct over the art of record and are in condition for allowance. In view of the foregoing amendment and remarks, early and favorable reconsideration of this application is respectfully requested.

Respectfully submitted,

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